



Received on 05 March 2024; received in revised form, 20 March 2024; accepted, 22 April 2024; published 01 August 2024

## KNOWLEDGE, ATTITUDE AND PRACTICE OF SELF-MEDICATION AMONG THE SECOND YEAR MBBS STUDENTS IN A TERTIARY CARE HOSPITAL: A QUESTIONNAIRE BASED STUDY

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### Keywords:

Knowledge, Self-medication, Attitude, MBBS, Practice

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**ABSTRACT: Introduction:** Self-medication is becoming more and more common in our daily lives but it's an unhealthy and risky habit. It assumes that second year MBBS students holds special significance as they start to deepen their knowledge about diseases and medications, which forms a critical foundation for their medical education and future practice. This is the only study conducted in the northeastern region of India till date. The objective of the study is to assess the knowledge, attitudes, and practices regarding self-medication among second-year MBBS students at Silchar Medical College and Hospital. A cross-sectional survey was conducted using a pre-formed questionnaire including both open and close ended questions among the second year MBBS students over a period of one month after taking written inform consent from the participants. Data was collected by using google form and result expressed as counts and percentage. **Result:** Out of 120 participants, 72(60%) were males and 48(40%) were females. Out of them total 116 students took self-medication and among them 90 students provided reasons in support of the notion that visiting a doctor for minor illnesses was unnecessary. Previous prescriptions were the major source of information about drugs and medical stores were the major source of drugs and PPI and antacids were the commonly used self-medication drugs. **Conclusion:** Self-medication on the basis of insufficient information should be discouraged as medical students will eventually provide healthcare to this nation, should have the knowledge about the risk of taking drugs without proper advice from a certified medical professional.

**INTRODUCTION:** The World Health Organization (WHO) states that, "Self-medication involves the choice and application of medications by individuals to address self-recognized illnesses or symptoms"<sup>1-2</sup>. The practice of self-medication, which is unsafe & unhealthy, is growing more prevalent in our daily lives, and its irrational usage is alarming.

It is usual for individuals to feel unwell, and people naturally have an inclination to treat themselves by using herbs, potions, drugs, etc. Self-care is a daily action that individuals all around the world take for their wellbeing.

They may either succeed in this attempt, raising their self-confidence and pushing them to use it often or even excessively, or they can fail and have negative health effects or disease. It is also acknowledged that self-medication has to be supported with relevant and correct medical information. When practiced responsibly, appropriate self-medication can offer valuable benefits in managing minor health issues efficiently

<b>QUICK RESPONSE CODE</b> 	<b>DOI:</b> 10.13040/IJPSR.0975-8232.15(8).2551-55
	This article can be accessed online on <a href="http://www.ijpsr.com">www.ijpsr.com</a>
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and economically especially in situations with limited resources<sup>3</sup>. In developing countries reported prevalence rates of practicing self-medications are much higher, with 79% in India<sup>4-5</sup>. Self-medication drugs are sold by pharmacies without a prescription under the names "nonprescription" or "over the counter" (OTC). Self-medication habits can result in health risks and morbidity, which lowers the quality of overall health<sup>6</sup>.

Medical undergraduates frequently engage in self-medication practices, particularly second year MBBS students, who are exposed to knowledge about illnesses and medications but may not fully comprehend the treatment they're administering. Since medical students will eventually become a part of the healthcare team and health educators, studying self-medication in this group of students is essential. However, very little study has been done on the beliefs and habits of self-medication among the medical students of India. This research study stands as the sole research conducted in the north-eastern region of India to date. The purpose of this questionnaire-based study was to learn more about second year MBBS students' knowledge, attitudes, and practices about self-medication as well as their perceptions of the practice as they are taught about diseases and medications.

## MATERIALS & METHODS:

**Study Design & Study Setting:** This is a descriptive cross-sectional study using a questionnaire, performed over a one-month period, from January 1, 2024, to February 1, 2024, at Silchar Medical College & Hospital in Silchar, Assam.

**Ethical Considerations:** The Institutional Ethics Committee granted approval for this study under reference number, IEC No. SMC/18.840 (Dated, Silchar, the 23/11/2023). Objectives of the study were clarified and written one to one informed consent was taken from all participants. Anonymity and confidentiality of the participants were maintained.

**Study Participants:** The study included 120 second year MBBS students of Silchar Medical College and Hospital, Silchar, Assam, who were selected by convenience sampling.

**Inclusion Criteria:** Students, willing to participate and took self - medication during the last 1 year.

**Exclusion Criteria:** Incompletely filled questionnaire.

**Study Tool:** Both Close and open-ended pre-designed and pre-tested questionnaire was circulated amongst the study participants through google forms. The questionnaire was subdivided into two sections.

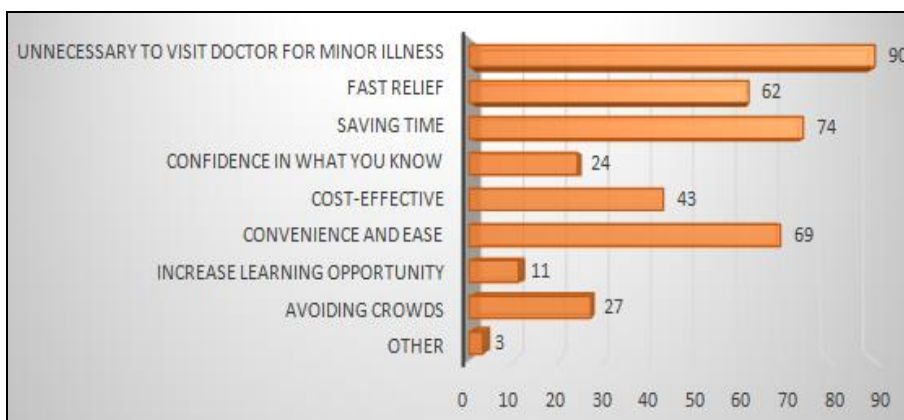
**Section 1** comprised of demographic information about the study participants.

**Section 2** contained both closed and open- ended questionnaires which were prepared to assess Self - medication related question by using Likert scale, multiple responses and perceptions of students regarding self-medication.

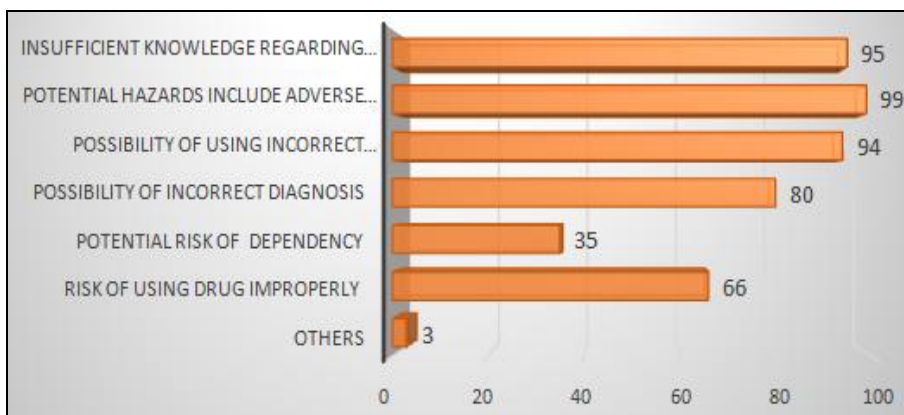
**Data Analysis:** Microsoft excel 2019 was used, results were conveyed in percentage and counts.

**RESULTS:** 120 second year MBBS students participated in this research study and all of them returned completely filled questionnaires. Out of 120 students n=72 (60%) were males and n=48 (40%) were females. Participants' ages in the study spanned from 18 to 27 years, with an average age of 20.25 years. About n=116(96.7%) of them sometimes used self-medication and the remaining n=4(3.3%) had always used.

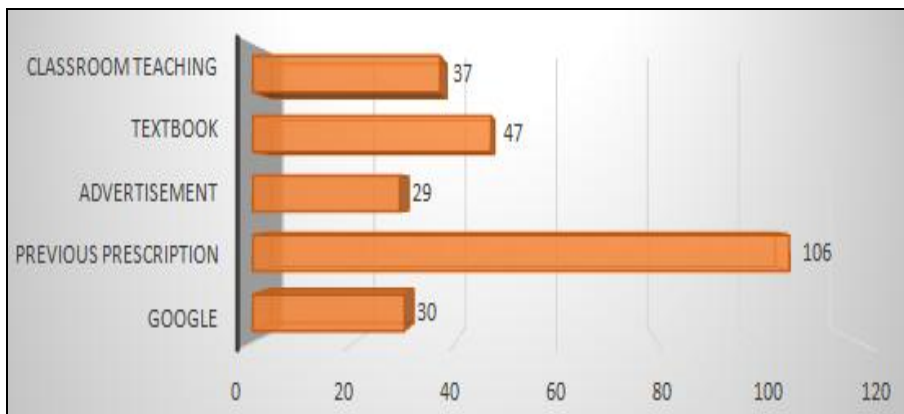
**Knowledge:** The main reasons for taking Self-medication comprised the belief that consulting a doctor for minor ailments was unnecessary=90 (75%), It saved time n=74 (61.7%), and there was convenience and ease in taking Self-medication n=69 (57.5%) and fast relief was obtained through self-medication n=62 (51.7%) **Fig. 1**. The primary reasons for abstaining from self-medication included concerns about the potential adverse effects n=99 (82.5%), lack of knowledge about medicines n=95(79.2%), possibilities of using incorrect drugs n=94 (78.3%) and risk of incorrect diagnosis n=80 (66.7%) **Fig. 2**. Previous prescriptions were the major source of information n= 106(88.3%) about drugs and the primary source of medicines used for self-medication, identified as drugstores or pharmaciesn= 116(96.7%) **Fig. 3** and **Fig. 4** respectively).



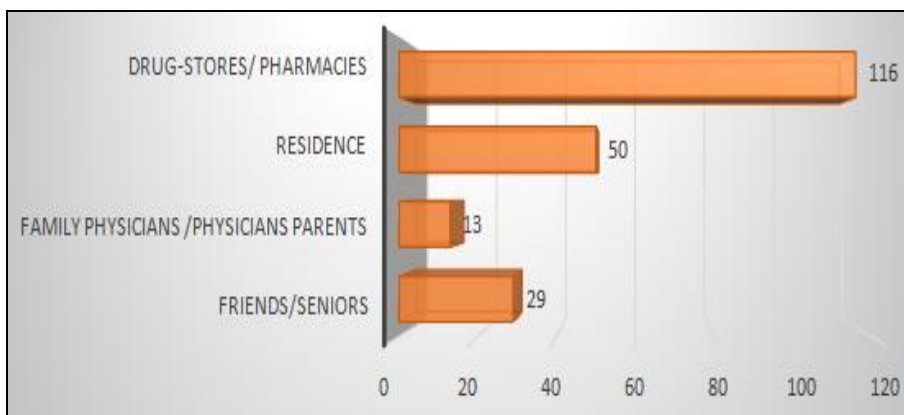
**FIG. 1: REASON IN FAVOR OF SELF-MEDICATION**



**FIG. 2: THE RATIONALE BEHIND NOT USING SELF-MEDICATION**

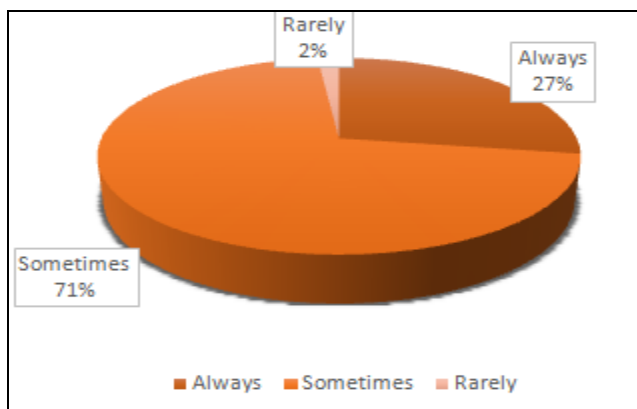


**FIG. 3: SOURCE OF INFORMATION REGARDING MEDICATIONS UTILIZED FOR SELF-TREATMENT**



**FIG. 4: SOURCE OF MEDICINES USED FOR SELF-MEDICATION**

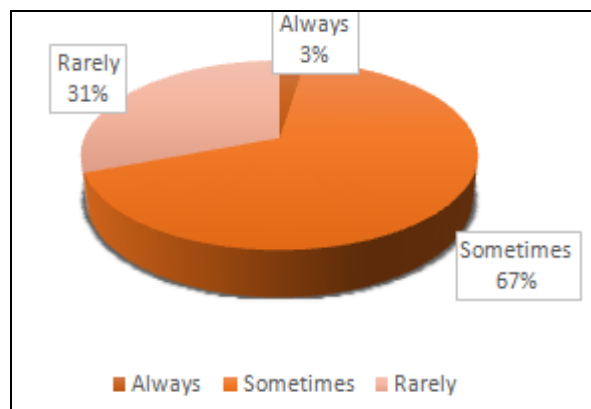
**Attitude:** In our study, it was observed that among 120 students, 32 (27%) MBBS students always visited a qualified medical practitioner when feeling unwell, while 85(71%) mentioned that they sometimes visited one, while only 3(2%) students reported visiting only rarely. These findings are summarized in **Fig. 5**.



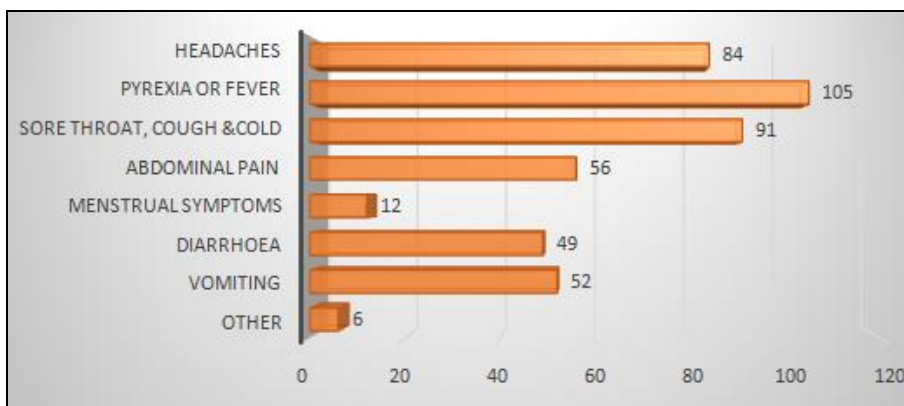
**FIG. 5: VISITED TO A QUALIFIED MEDICAL PRACTITIONER**

**Practice:** Among them, 67% sometimes practiced Self-medication, 31% practiced rarely and 2% students always practised self-medication **Fig. 6**. In our study involving 120 students, it was found that a significant portion of them engaged in self-

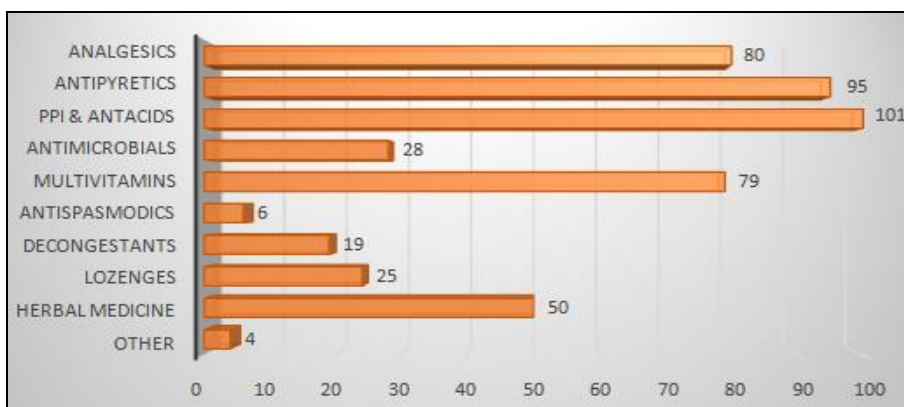
medication for various health issues. Specifically, 105 students (87.5%) reported self-medicating for pyrexia or fever, followed by 91 students (75.8%) for cough and cold and 84 students (70%) for headaches. These findings are illustrated in **Fig. 7**. Furthermore, out of the total 120 students, the majority, 100 students (83.3%), reported using Proton Pump Inhibitors (PPIs) and antacids as self-medication, followed closely by 95 students (79.2%) who used antipyretics. These results are depicted in **Fig. 8**.



**FIG. 6: STUDENTS WHO PRACTICED SELF-MEDICATION**



**FIG. 7: INDICATIONS FOR SELF-MEDICATION**



**FIG. 8: COMMONLY USED SELF-MEDICATION DRUGS**



**DISCUSSION:** The study revealed that male students were more inclined to self-medicate than female students. In our study, out of 120 respondents, a total of 116 students reported engaging in self-medication. Among these, 90 students provided justifications in support of self-administration, with the main rationale being the belief that visiting a doctor for minor illnesses is unnecessary. A significant concern raised by students against self-medication was the risk of adverse effects due to inadequate knowledge of medicines. This finding is consistent with similar studies, such as the one conducted by James *et al*<sup>7</sup>.

Interestingly, it was found that the medicines used for self-medication were obtained from previous prescriptions by 106 participants, indicating that these students had previously sought medical advice for the same condition and chose not to seek medical consultation again for similar symptoms. Additionally, pharmacies were identified as the primary source of these self-medication drugs, which corresponds to the research carried out by Klemenc *et al*<sup>8</sup>. According to the findings of this study, 105 students reported using self-medication to address issues such as fever, eyes discomfort from studying, and difficulty sleeping. These students often resorted to self-administering antipyretics for fever and analgesics for eye strain and lack of sleep. Similar trends were observed in studies done by Zafar *et al*<sup>9</sup> and James *et al*<sup>7</sup>, indicating a consistent pattern of self-medication for similar health concerns across different research efforts. Furthermore, the study revealed that proton pump inhibitors (PPIs) and antacids were the frequently utilized category of medications for self-administration, with antipyretics and analgesics following closely behind. This highlights the prominence of gastrointestinal issues and fever management as common reasons for self-medication among the student population studied.

**CONCLUSION:** Self-medication on the basis of insufficient information should be discouraged as

medical students will eventually provide healthcare to this nation, they need to understand the drawbacks of consuming medications without proper guidance from a qualified medical professional.

**ACKNOWLEDGMENT:** I want to express my genuine thanks to the study participants. Without their active involvement, this study wouldn't have been achievable.

**CONFLICTS OF INTEREST:** Nil

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### How to cite this article:

Saha N, Roy D and Das P: Knowledge, attitude and practice of self-medication among the second year MBBS students in a tertiary care hospital: a questionnaire based study. *Int J Pharm Sci & Res* 2024; 15(8): 2551-55. doi: 10.13040/IJPSR.0975-8232.15(8).2551-55.

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